

Research Animal Awareness Outreach Through the "NIH Take Your Child to Work Day" Program

D. Bordine*, P. Brown and T. Clark

National Institutes of Health, Office of the Director, Division of Intramural Research, Office of Animal Care and Use, Bethesda, MD

Abstract

Authors: D. Bordine*, P. Brown and T. Clark - National Institutes of Health, Office of the Director, Division of Intramural Research, Office of Animal Care and Use, Bethesda, MD

Animal Awareness Outreach Through the "NIH Take Your Child to Work Day" Program

For the past 14 years the National Institutes of Health has supported the "Take Your Child to Work Day" observance in an effort to show children where their parent's work and to encourage careers in biomedical research. The Office of Animal Care and Use (OACU) developed an outreach program to explain proper research animal care and to encourage animal science related careers. In the past three years the OACU program has been presented to over 1,100 children and parents. "Interview with a Mouse" is the animal care presentation for children, ages 8 to 11 and features a reporter interviewing one of our staff veterinarians dressed as a laboratory mouse. During the interview the mouse explains her experiences while living and working at NIH. The mouse also emphasizes how important her participation is in research that ultimately helps save people's and animals' lives. "Adventures of an NIH Veterinarian" is for children ages 12 to The Veterinarian character tells of adventures while supporting animal research on the NIH campus. She provides information about the application and review process before scientists use animals in research, how we know research animals are properly cared for, and finally how animal research helps save both animal and human lives. The total program has been refined over the years by evaluating surveys and written from comments The purpose of this participants. poster is to describe the OACU program and provide an explanation of its evolution and to encourage other outreach programs to promote a better understanding of how animal use benefits biomedical and veterinary sciences.

Acknowledgements:

HHS NIH Office of Equal Opportunity & Diversity Management and the NHGRI Office of Laboratory Animal Medicine



Fig. 1 - National Institutes of Health Bethesda, Maryland

Each spring or the past 14 years, the National Institutes of Health has supported the "Take Your Child to Work Day" observance in an effort to show children where their parent's work and encourage careers in biomedical research. During the 2006 event 1,573 children registered to attend presentations throughout the Bethesda campus.

The, age distribution breakdown (Table 1) 2006 showed 64% of the attendees were under the age of 12.

Percentage	Total Percentage	Age
19.83 %	312	8
15.45%	243	9
14.81%	233	10
13.60%	214	11
14.18%	223	12
10.36%	163	13
7.44%	117	14
4.32%	68	15
	1573	

Table 1 – Distribution by Age 2006 for the NIH Take Your Child to Work Day

Because the use of animals in research has not received "positive press" in children's movies and cartoons, the Office of Animal Care and Use (OACU) developed a two part program in 2001 as an outreach activity to correct some of the misconceptions, explain proper research animal care and encourage veterinary careers. The program targets children from ages eight to 16 in an entertaining, yet educational forum.



Fig. 2 - Students check in at the registration table and receive their "goodie bag".

Hypothesis: Children of NIH staff may not have a complete understanding of the use of animals

In the spirit of "Sesame Street" and "Barney", younger students (age's eight to 11) were encouraged to attend the animal care presentation "Interview with a Mouse". It features a junior reporter (the teenage son of the mouse character) interviewing a veterinarian (the reporter's Mom) dressed as a laboratory mouse.



Fig. 4 – NIH veterinarian dressed as "Meredith Mouse" responds to questions.

During the interview the mouse explains, in simple terms, her experiences while living and working at NIH. Children learn what mice eat and drink, what their houses are like, what toys they have and the special care they get.

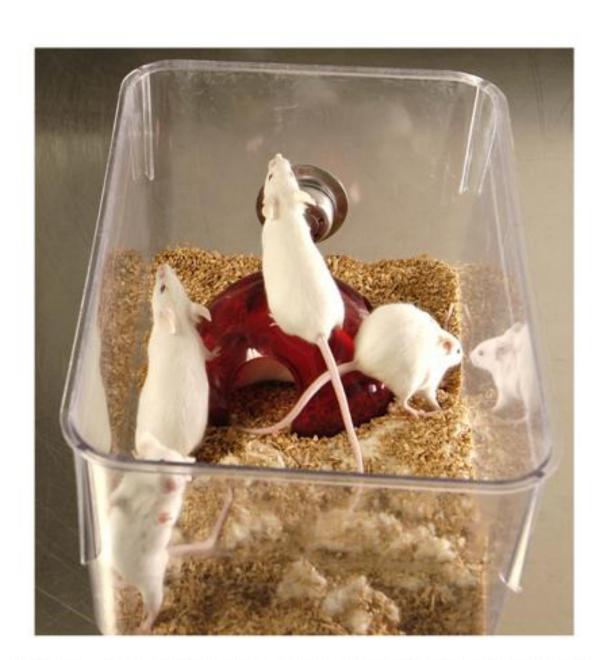


Fig. 5 - A real mouse using enrichment materials.

Many power point slides are used during the interview to show real mice in their environments. (Despite requests over the years we do not bring any live mice to the presentation as such exposure would be too stressful for the animal. Consequently, we have used an abundance of media clips to provide as many perspectives on research animals lives as possible.) The mouse also emphasizes how important her participation is in research that ultimately helps save people's and animal's lives.

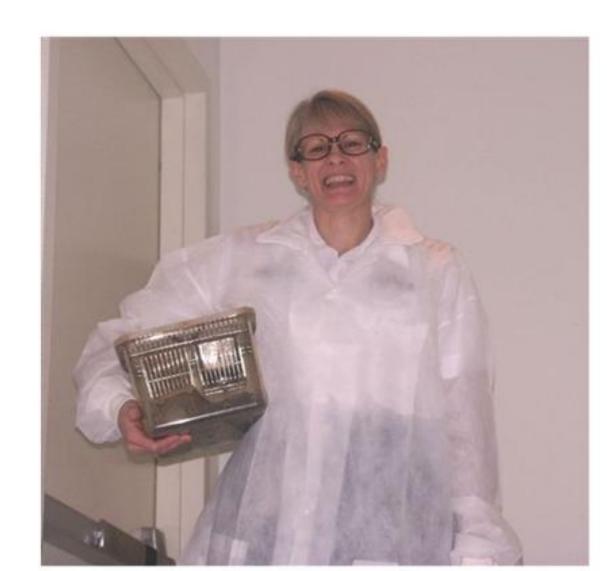


Fig. 6 - NIH veterinarian portraying "Dr. Ima Goodwon" in the Adventures of an NIH Veterinarian" presentation.

The second presentation, "Adventures of an NIH Veterinarian" is for children ages 12 to 16. The veterinary character tells of her adventures while supporting animal research on the NIH campus. She provides information about the application and review process scientists use before they use animals in research. She explains the methods we use to be sure that animals are properly cared for. Finally, she tells how animal research helps save both animal and human lives.



Interview with a Mouse

Is there anything we should change about our presentation? If

Thanks for visiting us teday. Please answer the following questions

that she is helping scientists

the disease she has that kids can get

Before and after each presentation actual animal related equipment and materials were displayed at stations around the auditorium for all to touch, examine and in some cases taste! All three displays were stocked with the same items: rodent bedding, rodent caging, nesting material, water bottles, both rodent and nonhuman primate toys, and various food items. The food treats were vegetable and fruit flavored which the attendees were encouraged to taste. There were two animal care expert volunteers at each display table to answer questions. Each volunteer wore an assortment of Personal Protective Equipment (PPE) and complete sample sets of PPE (light-weight protective clothing, cap, mask, booties, and gloves) were also at each table.

While waiting for the presentations to begin a video accompanied with music was shown featuring research animals in their racks and a tour of some animal facilities that house them.

Fig. 7 - Hands-on display of rodent housing, food and enrichment materials.

The total program has been refined over the years by evaluating surveys and written comments from the participants.





The OACU program has been presented to over 1,100 children and parents. Each child was given a "goodie bag" at registration. The April 2006 the bag included:

- OACU logo bag
- three bookmarks
- one cut out and fold mouse
- three puzzle/quiz sheets and a "Career in Caring" sheet all of which were from the American Association for Laboratory Animal Science.
- chocolate mint coin with the OACU logo
- OACU pen
- a bean bag mouse with "NIH Animal Research Saves Lives" printed on its tee shirt
- silicone wrist bands with the same message, and a survey was also enclosed.
- Fig. 3 "Goodie Bag" educational materials and

animal research promotional items.

The materials were selected to remind the youngsters of what was presented in the skits and also as a strong take home message reinforced by the activities on the book marks. If the surveys were returned, each young person was given a magnet with message "Good Animal Care and Good Science Go Hand in Hand" to "thank them" for their input.

Survey Forms, Results and Findings

ADVENTURES OF AN NIH VETERINARIAN faanks for visiting us today. Please take a few minutes and answer the following Turn it in as you leave and receive a special prize!

- Of the things you heard today from Meredith about her life here at NEH, which was the most INTERESTING? Gircle 1 Of the things you heard today about Dr. Ima Goodwon's role as a research. eterinarian, which was the most inferenting? talks with scientist about animal models makes sure the animals are properly housed, fed and watered talks with her set case team about the research before it starts.
- that she is protected by the government d. the toys she has works with the scientist to make sure the animals are properly cared for provides care based on laws and regulations the core she get her special genes g. the coge she lives in What do you think was the most important thing Dr. Ima Goodwon talked shout today?

 talks with scientist about animal models

 makes sure the animals are properly housed, fed and watered

 talks with her wet care team about the research before it starts

 works with the scientist to make sure the animals are properly cared for

 provides care based on laws and regulations the water lixit What was the most INPORTANT thing that Maredith told you
- Is there anything we should do differently next year? (Your parents can help with this cost.) animals at NIH get very good care scientists only use animals when there is not other we mice have no hair when they are born the government has lows to protect animals when they are

NOTE: We cannot bring live animals to this presentation because it would be too stressful for them

Fig. 8 – Survey forms used to evaluate the "Interview with a Mouse" and "Adventures of an NIH Veterinarian" presentations.

The surveys for both presentations have evolved during each of the past three years. There are four questions on each and were designed to capture demographics, determine the most memorable themes and lastly an opportunity to provide suggestions for improvement. The responses were tallied for the two sessions of "Interview with a Mouse" and the singular "Adventures of an NIH Veterinarian".

After tallying the results the modes for the multiple choice questions #2 and 3 on all the surveys were calculated. For "Interview with a Mouse" question #2 the majority of respondents from both sessions were most interested that the mouse had diseases that kids could get. Question #3 had two different modes. For 9:00 a.m. the most important thing they learned was that "people and animals can get the same diseases". At 11:00 a.m. they felt that "scientists are trying to fix genes using viruses". For "Adventures of an NIH Veterinarian" on both question #2 and 3 revealed that the most interesting thing they learned was that veterinarians "make(s) sure the animals are properly housed, fed and watered". Many of the surveys were returned with comments and the vast majority were positive in nature.

Conclusion:

Based on the popularity of our programs there is a strong interest from both NIH parents and children in the role animals have in biomedical research. The data was then analyzed using descriptive statistics. The modes were used to determine respondent's most memorable information from the presentations. They felt that the care and feeding of the animals was most important. They were also impressed with the fact that mice could get the same diseases as people and finally that scientists are trying to fix genes using viruses. This poster was designed to describe the "Take Your Child to Work" event and its evolution as part of the OACU outreach program. Other outreach programs are encouraged to use similar efforts to promote a better understanding of how animal use benefits biomedical and veterinary sciences as they relate to improving the health of our society.



